

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method for modeling a configuration corresponding to a network device, wherein the configuration includes a plurality of configuration commands, the method comprising:

determining a characteristic of the network device, wherein determining the characteristic of the network device comprises determining one of a network device manufacturer, network device model, and network device operating system version;

~~retrieving at least~~ a representation of a configuration schema, ~~the at least a~~ representation of a configuration schema corresponding to the determined characteristic of the network device;

retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device; and

generating an XML object corresponding to the retrieved configuration command; wherein the XML object is generated according to at least a portion of the retrieved ~~at least the~~ representation of the configuration schema.

2. (cancelled)

3. (currently amended) The method of claim 1, wherein the ~~at least the~~ representation of the configuration schema comprises a plurality of schema portions and wherein retrieving the ~~at least the~~ representation of the configuration schema comprises:

retrieving an intermediate representation of the configuration schema, wherein the intermediate representation comprises a plurality of keys;

wherein each of the plurality of keys is associated with a corresponding one of the plurality of schema portions.

4. (original) The method of claim 3, wherein retrieving the intermediate representation of the configuration schema comprises:

retrieving a hash table.

5. (original) The method of claim 3, further comprising:

generating a look-up key for the retrieved configuration command.

6. (original) The method of claim 5, further comprising:

identifying a first of the plurality of keys in the intermediate representation, the first of the plurality of keys corresponding to the generated look-up key; and

retrieving a first of the plurality of schema portions, the first of the plurality of schema portions corresponding to the first of the plurality of keys;

wherein the XML object is generated according to the first of the plurality of schema portions.

7. (original) The method of claim 1, further comprising:
converting the XML object to an XML document.
8. (original) The method of claim 7, further comprising:
converting the XML document into a document object model (DOM).
9. (original) The method of claim 8, further comprising:
verifying the DOM against the at least the representation of the configuration
schema.
10. (original) A system for modeling a native-format network device configuration, the
system comprising:
an intermediate schema representation system (ISR);
an XML converter connected to the ISR, the XML converter configured to
convert the native-format network device configuration into an XML document; and
a document object model (DOM) transformer connected to the XML converter,
the DOM transformer configured to transform the XML document into a DOM.
11. (original) The system of claim 10, wherein the native-format network device
configuration is associated with a router.
12. (original) The system of claim 10, wherein the native-format network device
configuration is associated with a data storage system.

13. (original) The system of claim 10, wherein the native-format network device configuration is associated with an optical component.

14. (original) The system of claim 10, further comprising:

a DOM storage device for storing the DOM.

15. (original) The system of claim 14, wherein the DOM storage device comprises temporary storage.

16. (original) The system of claim 14, further comprising:

an XML-to-XML converter connected to the DOM storage device.

17. (original) The system of claim 14, further comprising:

an XML-to-CLI converter connected to the DOM storage device.

18. (original) The system of claim 14, further comprising:

a graphical user interface connected to the DOM storage device.

19. (original) A system for modeling a network device configuration, the system comprising:

- a plurality of network devices;
- a DOM generator connected to the plurality of network devices;
- a configuration schema storage device connected to the DOM generator; and
- a DOM storage device connected to the DOM generator.

20. (original) The system of claim 19, further comprising:

- a DOM application connected to the DOM generator.

21. (original) The system of claim 19, wherein the configuration schema storage device comprises:

- an intermediate schema representation storage device.

22. (original) The system of claim 19, further comprising:

- an XML-to-XML converter connected to the DOM generator.

23. (original) The system of claim 19, further comprising:

- an XML-to-CLI converter connected to the DOM generator.

24. (currently amended) A method for modeling a configuration corresponding to a network device, wherein the configuration includes a plurality of configuration commands, the method comprising:

determining a characteristic of the network device, wherein determining the characteristic of the network device comprises determining one of a network device manufacturer, network device model, and network device operating system version;

retrieving ~~at least a~~ representation of a configuration schema, the ~~at least a~~ representation of a configuration schema corresponding to the determined characteristic of the network device;

retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device; and

generating a standard-format representation of the retrieved configuration command;

wherein the standard-format representation is generated according to at least a portion of the retrieved ~~at least a~~ representation of the configuration schema.

25. (currently amended) The method of claim 24, wherein the ~~at least the~~ representation of the configuration schema comprises a plurality of schema portions and wherein retrieving the ~~at least the~~ representation of the configuration schema comprises:

retrieving an intermediate representation of the configuration schema, wherein the intermediate representation comprises a plurality of keys;

wherein each of the plurality of keys is associated with a corresponding one of the plurality of schema portions.

26. (original) The method of claim 25, further comprising:

generating a look-up key for the retrieved configuration command.

27. (original) The method of claim 26, further comprising:

identifying a first of the plurality of keys in the intermediate representation, the first of the plurality of keys corresponding to the generated look-up key; and

retrieving a first of the plurality of schema portions, the first of the plurality of schema portions corresponding to the first of the plurality of keys;

wherein the standard-format representation is generated according to the first of the plurality of schema portions.

28. (original) The method of claim 24, wherein the standard-format representation comprises an XML object.

29. (currently amended) A system for modeling a configuration corresponding to a network device, wherein the configuration includes a plurality of configuration

commands, the system comprising:

a processor;

a storage device connected to the processor; and

a plurality of instructions stored on the storage device, the plurality of instructions configured to cause the processor to:

determine a characteristic of the network device, wherein the instructions configured to determine the characteristic of the network device comprise instructions configured to determine one of a network device manufacturer, network device model, and network device operating system version;

retrieve ~~at least a~~ representation of a configuration schema, the ~~at least a~~ representation of a configuration schema corresponding to the determined characteristic of the network device;

retrieve a first of the plurality of configuration commands from the network device configuration corresponding to the network device; and

generate a standard-format representation of the retrieved configuration command;

wherein the standard-format representation is generated according to at least a portion of the retrieved ~~at least the~~ representation of the configuration schema.

30. (currently amended) The system of claim 29, wherein the ~~at least the~~ representation of the configuration schema comprises a plurality of schema portions and wherein the plurality of instructions cause the processor to retrieve the at least the representation of the configuration schema by:

retrieving an intermediate representation of the configuration schema, wherein the intermediate representation comprises a plurality of keys;

wherein each of the plurality of keys is associated with a corresponding one of the plurality of schema portions.

31. (original) The system of claim 29, wherein the plurality of instructions are further configured to cause the processor to:

generate a look-up key for the retrieved configuration command.

32. (original) The system of claim 31, wherein the plurality of instructions are further configured to cause the processor to:

identify a first of the plurality of keys in the intermediate representation, the first of the plurality of keys corresponding to the generated look-up key; and

retrieve a first of the plurality of schema portions, the first of the plurality of schema portions corresponding to the first of the plurality of keys;

wherein the standard-format representation is generated according to the first of the plurality of schema portions.

33. (original) The system of claim 29, wherein the standard-format representation comprises an XML object.

34. (original) The system of claim 31, wherein the plurality of instructions are further configured to cause the processor to:

convert the XML object to an XML document.

35. (original) The system of claim 34, wherein the plurality of instructions are further configured to cause the processor to:

convert the XML document into a document object model (DOM).

36. (original) The system of claim 35, wherein the plurality of instructions are further configured to cause the processor to:

verify the DOM against the at least the representation of the configuration schema. -